

REMARKS

This Amendment is made pursuant to the Office Action mailed on March 2, 2004.

Submitted concurrently herewith is a check in the amount of \$420.00 to cover the cost for a two-month extension of time to extend the time to which a response needs to be filed to August 2, 2004.

PERSONAL INTERVIEW WITH THE EXAMINER

The undersigned initially wishes to express his appreciation to the examiner for the courtesy of the personal interview granted to the undersigned and others on June 24, 2004.

OBJECTION TO THE SPECIFICATION

A minor amendment has been made to paragraph 20, to eliminate a typographical error with regard to the terms S_2 and S_7 , and to correctly reference the total number of armature coils in paragraph 23.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claims 14-20 and 23-30 were rejected under 35 U.S.C. § 112, first paragraph. The examiner believed that the term "magnetic neutral zone," as used in the claims, was inaccurate and/or incorrect. In the interest of advancing prosecution, the undersigned has deleted this term from the claims. The term has also been deleted from the "detailed description" portion of the application, per the amendments made to paragraph 24 of the application. The term "magnetic neutral zone" was left in the "Background" section of the application, as it is not believed that the examiner objected to the use of this term in the context in which it was used to describe the general

problem facing prior armature designs. Reconsideration is therefore respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 14, 26, 28, 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Klein (US Patent No. 4,329,610) and Van Assema (US Patent No. 5,172,870). Per the discussion with the examiner at the personal interview of June 24, 2004, minor amendments have been made to independent claims 17, 23, 26 and 30 to more positively highlight various claimed limitations. In particular, these amendments point out that with the present invention, commutation occurs within a substantially common angular region relative to a given pair of the field coils, or relative to the brushes.

Klein and Van Assema do not, either independently or when taken together, render obvious the above-mentioned independent claims as they presently stand amended. Reconsideration is, therefore, respectfully requested.

NEW CLAIMS

New claims 31-39 have been added to further cover "an electric motor" having coils that at least substantially complete commutation within either the "same angular region" or within a "predetermined angular region" relative to a given pair of field coils, or substantially within the same angular region relative to the commutator bars to which each coil is attached. It is believed that these claims are also allowable over the art of record.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: August 2, 2004

By: 
Mark D. Elchuk, Reg. No. 33,686

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600
MDE/jo/djq